UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/773,470	02/05/2004	Takeshi Sampei	KON-1853	7008

20311 7590 10/05/2005

LUCAS & MERCANTI, LLP
475 PARK AVENUE SOUTH
15TH FLOOR
NEW YORK, NY 10016

EXAMINER	
CULLER, JILL E	

ART UNIT	PAPER NUMBER
2854	

DATE MAILED: 10/05/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/773,470	SAMPEI ET AL.	
	Examiner	Art Unit	
	Jill E. Culler	2854	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *05 February 2004* .

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-23* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-6,8-15 and 17* is/are rejected.

7)☒ Claim(s) *7,16 and 18-23* is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *05 February 2004* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11)☐ The proposed drawing correction filed on _____ is: a)☐ approved b)☐ disapproved by the Examiner.

If approved, corrected drawings are required in reply to this Office action.

12)☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

13)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____ .

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

14)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).

a) ☐ The translation of the foreign language provisional application has been received.

15)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) *20041217* .
4) ☐ Interview Summary (PTO-413) Paper No(s). _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: .

DETAILED ACTION

Claim Objections

1. Claim 23 is objected to under 37 CFR 1.75(c), as being of improper dependent form for failing to further limit the subject matter of a previous claim. The limitations of Claim 23 are the same as those for claim 16, from which it depends. It appears that applicant may have intended claims 18-23 to depend upon claim 17 instead of 16. Currently, however, they must be examined as written and rejected accordingly.

Appropriate correction is required.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

3. Claims 1-6, 8-15 and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 4,951,568 to Tsukamoto et al. in view of U.S. PGPUB 2002/0009574 to Hiraoka.

With respect to claim 1, Tsukamoto et al. teaches a printing plate material, 20, comprising a support and provided thereon, an image formation layer, the support being a polyester film sheet wherein the printing plate material is capable of being folded by heating. See column 3, lines 60-64 and column 4, lines 43-54.

Tsukamoto et al. does not teach that the thickness dispersion of the support is not more than 10%.

Hiraoka teaches a printing plate material comprising a support with a thickness dispersion of not more than 10%. See page 2, paragraph 40 and page 3 paragraph 45.

It would have been obvious to one having ordinary skill in the art at the time of the invention to use the thickness dispersion of Hiraoka with the invention of Tsukamoto et al. in order to provide a printing plate material which is more readily shaped as desired.

With respect to claims 8-10, Tsukamoto et al. teaches a process of printing comprising the steps of: forming an image on a printing plate material capable of being folded by heating comprising a support and provided thereon, an image formation layer, the support being a polyester film sheet with a thickness dispersion of not more than 10%, and the material being not subjected to wet development; folding the resulting printing plate material at the edge portion by heating; and mounting the folded printing plate material on a plate cylinder of a printing press. See column 3, lines 60-64, column 4, lines 43-54 and column 5, lines 38-42.

Tsukamoto et al. does not teach that the thickness dispersion of the support is not more than 10%. Tsukamoto et al. also does not teach a step of removing the image formation layer at non-image portions of the printing plate material mounted on the plate cylinder, wherein the image formation is carried out employing a thermal head or a thermal laser and the removing is carried out by supplying dampening water and/or printing ink to the printing plate material.

Hiraoka teaches a teaches a printing plate material comprising a support with a thickness dispersion of not more than 10%. See page 2, paragraph 40 and page 3 paragraph 45. Hiraoka also teaches a process of printing including the steps of mounting a printing plate material on a plate cylinder, forming an image using a thermal head or a thermal laser, and removing the image formation layer at non-image portions of the printing plate material by supplying dampening water and/or printing ink to the printing plate material. See page 6, paragraphs 83-84.

It would have been obvious to one having ordinary skill in the art at the time of the invention to use the thickness dispersion of Hiraoka with the invention of Tsukamoto et al. in order to provide a printing plate material which is more readily shaped as desired. It would also have been obvious to one having ordinary skill in the art at the time of the invention to form the image using a thermal head or a thermal layer and removing the image formation layer at non-image portions of the printing plate material by supplying dampening water and/or printing ink to the printing plate material in order to form a more precise imaging surface.

With respect to claims 2-6 and 11-15, Tsukamoto et al. does not teach that the support has an average thickness of from 80 to 400 .mu.m., the image formation layer contains heat melting particles or heat fusible particles, one or more hydrophilic layers are provided between the support and the image formation layer wherein at least one of the hydrophilic layers has a porous structure or that the printing plate material further comprises a layer containing a light-to-heat conversion material.

Hiraoka teaches a printing plate material wherein the support has an average thickness of from 80 to 400 .mu.m., see page 2, paragraph 40, the image formation layer contains heat melting particles or heat fusible particles, see page 2, paragraph 39, one or more hydrophilic layers are provided between the support and the image formation layer wherein at least one of the hydrophilic layers has a porous structure, see page 3, paragraphs 45 and 49 and the printing plate material further comprises a layer containing a light-to-heat conversion material. See page 6, paragraph 80.

It would have been obvious to one having ordinary skill in the art at the time of the invention to modify the invention of Tsukamoto et al. to use a printing plate material with the specific features taught by Hiroaka, in order to provide a more durable printing plate.

With respect to claim 17, Tsukamoto et al. teaches a process of folding a printing plate material comprising a support and provided thereon, an image formation layer, the support being a polyester film sheet, the process comprising the step of: folding the printing plate material at the edge portion by heating. See column 3, lines 60-64 and column 4, lines 43-54.

Tsukamoto et al. does not teach that the thickness dispersion of the support is not more than 10%.

Hiraoka teaches a printing plate material comprising a support with a thickness dispersion of not more than 10%. See page 2, paragraph 40 and page 3 paragraph 45.

It would have been obvious to one having ordinary skill in the art at the time of the invention to use the thickness dispersion of Hiraoka with the invention of Tsukamoto

et al. in order to provide a printing plate material which is more readily shaped as desired.

Allowable Subject Matter

4. Claims 7, 16 and 18-23 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The following is a statement of reasons for the indication of allowable subject matter: The prior art does not teach or render obvious a printing plate material or printing process as claimed particularly including a printing plate support that has a water content of not more than 0.5% by weight.

Conclusion

5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. U.S. Patent No. 3,413,706 to Shade et al. and U.S. Patent No. 4,540,612 to Rhyner each teach a process having apparent similarities to the claimed subject matter.

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jill E. Culler whose telephone number is (571) 272-2159. The examiner can normally be reached on M-Th 9:00-6:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Andrew Hirshfeld can be reached on (571) 272-2168. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

jec

Patent Examiner